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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/441,289	11/16/99	SUHY	A 1-21739

EXAMINER	
HEWITT II,C	
ART UNIT	**PAPER NUMBER**
2161	17

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DATE MAILED: 10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/441,289	SUHY ET AL.	
	Examiner	Art Unit	
	Calvin L Hewitt II	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16 and 21-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Status of Claims

1. Claims 16 and 21-48 have been examined

Response to Amendments/Arguments

2. The Examiner has read the Applicants' response, amendment and declaration regarding the Examiner's rejection, prior art and other matters pertaining to the patentability of the Applicants' claimed invention. However, the Applicants' response is not persuasive and the Examiner is maintaining his rejection. The rationale is as follows:

Yamamoto et al. disclose a construction machines management and monitoring system, utilizing sensors located on the machines to detect operating parameters and to determine whether the machine, and/or its components, is in need of servicing; where the monitoring system is distributed and includes controllers at different locations (abstract; figure 12; column 4, lines 16-50; column/line 8/26-9/30). More importantly, teaches a system, "... for managing and controlling maintenance information on all construction machines shipped by construction machine manufacturers throughout the world..." and,

"... a routine [that] continually determines whether every component of every vehicle has been replaced by a standby component or not" (column 9, lines 5-8; column 13, lines 3-12). Therefore, it is the Examiner's opinion that the differences between the Applicant's invention and the Yamamoto et al. reference are merely found in the production of an invoice and the particulars of a warranty and its application. However, the Applicant has not presented any limitation regarding warranty and invoice processing (e.g. date of service, predetermined standards, responsible parties, asset under warranty) that the Examiner does not regard as well known and obvious to one of ordinary skill of the art. Hence, it would have been obvious to combine the Huang and Brazilai et al. as they teach report generation for supply chain management ('707, abstract; column 36, lines 59-63) and a computerized system assisting users in product warranty fulfillment ('045, column 9, lines 10-35), respectively. Finally, the reason to combine the references is clear, after all Yamamota et al. teach a global management system for the maintenance and monitoring of heavy machines along with part and machine procurement. And, for the Applicants to believe that it would not have been at least obvious to incorporate invoices to identify and track what and when a machine was serviced and by who, to purchase a machine and/or part with a warranty, and to monitor the machine and/or part monitor using the warranty, in light of the teachings of Yamamota et al., is overly narrow and does not give fair credit to the level and knowledge of one of ordinary skill of the art.

Thus, when the Yamamoto et al., Huang and Brazilai et al. references are taken as a collective, to one of ordinary skill of the art, the criterion for obviousness is clearly met.

3. The declaration under 37 CFR 1.132 filed June 27th 2001 is insufficient to overcome the rejection of claims 16 and 21-48 based upon the 35 U.S.C. 103 rejection of claim 16 and 43-48 of Yamamoto et al. in view of Huang et al., claims 21-24, 27-35 and 38-42 of Yamamoto et al. in view of Barzilai et al. and claims 25, 26, 36 and 37 of Yamamoto et al. in view of Barzilai et al. and Huang et al. as set forth in the last Office action because: the conclusionary statements and website statistics found in the declaration do not establish commercial success.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al., U.S. Patent No. 6,141,629 in view of Huang et al., U.S Patent No.5,953.707.

As per claim 16, Yamamoto et al. teach transmitting data to an administrative controller (figures 10-12) that manages and controls maintenance information on all construction machines (column 9, lines 5-18). Regarding warranties, although not explicitly stated, the Examiner takes Official Notice that it is well known to generate an invoice and warranty upon purchasing an item. Further, their presence is at least implied or obvious, as a warranty is well known means of protecting a consumer against manufacturing errors and defects while an invoice provides "proof of purchase or service"'. It is also well known that when an owner[say] looks to execute a warranty, the owner will compare the current product defect with the standard found in the warranty in order to verify coverage. An example can be found when a new car owner experiences a defect in the steering after only 10,000 miles. In order to establish financial responsibility the owner will compare the coverage standard with the conditions of the current event [steering defect]. Huang et al. teach report generation based on a predefined set of criteria (column 36, lines 59-63) and where data is compared to a standard (column 36, lines 6364). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yamamoto et al. and Huang et al. The goal of the system of

Yamamoto et al. is to reduce machine down time through an improved capital equipment monitoring system. Two important aspects of the system are the central managing computer (column 9, lines 5-10), that controls and manages all maintenance information, and a global network that links the computers and provides for the flow of maintenance information. Building and construction projects are highly coordinated, highly time dependent activities. If a step or task in the construction process is running behind schedule all subsequent tasks will also fall behind resulting in costly delays affecting not only the consumer but also the construction company regarding future contracts. Equipment failure is a common source of delays. Yamamoto et al. look to avoid such obstacles by continuously monitoring equipment operational data and by distributing this data throughout the company via a global network. Hence, it would have been obvious for a user of the Yamamoto et al. system to use technology as a means of anticipating equipment failure and improving maintenance cycle-time. The automation of such basic maintenance related functions as report and invoice generation, would also logically take place and can be integrated into the system using the invoice generation method of Huang et al.

As per claims 42-48, the Examiner takes Official Notice that an entity who performs service on an asset for a second entity and generates a warranty report and/or maintenance invoice, and warranty handling is well known to those of ordinary skill of the art of maintenance and repair services. It is well

known, that the an entity can purchase an asset from an asset dealer or distributor. For example, an entity can purchase a car from a car dealer. A carmaker ("second entity") creates a warranty report informing the entity of car performance parameters that can be serviced without cost to the entity. If there is a problem with the car, the entity can bring it in to the dealer garage (another "second entity") and have it serviced for free if the problem is under warranty. After the service is performed, the dealer garage prepares an invoice identifying what was performed. Alternatively, an entity can choose to have a car serviced by a service chain. For instance, an entity can have the car service chain, e.g. Midas, look at the brakes. It is well known that car service chains make recommendations (e.g. mileage or dates) to entities as to when to have the serviced part re-checked. Further, if a problem that relates to the brakes (e.g. brake pads) is identified by the entity but is brought to the service chain after the recommended milestone, then the entity has to pay a substantial price. On the other hand, if the brake related problem is identified by the entity and brought to the service chain before the milestone it is free as it is under warranty. Therefore, it would have been obvious to implement such a processing in the combined Yamamoto et al. and Huang system in order to reduce maintenance costs.

6. Claims 21-24, 27-35 and 38-42 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamota et al., U.S. Patent No. 6,141,629.

As per claims 21-24, 27-35 and 38-42, Yamamota et al. teach:

- a local controller at a first location that acquires data regarding operating characteristics of an asset (figure 12; column 4, lines 30-50)
- a data acquisition device (column 4, lines 20-29)
- a transmitter (figure 12; column 4, lines 45-50)
- a second controller at an alternative location for data analysis, in particular to determine whether maintenance to an asset has taken place (figure 12, item 20; column 4, lines 44-50; column 9, lines 18-23; column 11, lines 17-23; column 11, lines 49-55; column 12, lines 54-57)
- an electronic communications network between the local controller and second controller (figure 12; column 4, lines 44-50)
- wireless communication between controllers (figure 12)
- an administrative controller that receives data from the second controller (figure 12; column 9, lines 5-18)
- a global communications network that links the second controller and administrative controller (figure 12; column 9, lines 18-23)
- automatic determination as to whether maintenance has been performed on an asset (column 13, lines 4-12)
- a plurality of administrative controllers (figure 12, items 50-60;

column 9,lines 5-23)

Yamamoto et al. do not teach automatic determination of whether or not maintenance has been performed at the analysis controller or systematic collation of data to obtain warranty data. Barzilai et al. teach an internet site for obtaining warranty information. In particular, Barzilai et al. use the internet to automatically provide users with suppliers and manufacturers for products and services and identifies the company who will fulfill and correct any warranty problem and its location (column/line 8/49-9/35). Therefore, it would have been obvious for one of ordinary skill in the art to combine the teachings of Yamamoto et al. and Barzilai et al. Regarding the analysis controller, it would have been obvious to one of ordinary skill to allow the analysis controller to perform such a function. Yamamoto et al. teach that the analysis controller is linked via a communication network to the administrative controller (column 9, lines 18-30) that monitors maintenance related data (column 9, lines 5-18; column 13, lines 4-12). It is also well known that warranties are associated with product maintenance and sale (purchased using the bid, auction and sale system of Barzilai et al.-column 1, lines 48-67). Further, site or local management has been known to possess more detailed knowledge of local events and conditions over remote supervisors. Therefore, by implementing the analysis controller of Yamamoto et al. with such a collating functionality, would lead to

improved efficiency and decision-making regarding project time, cost and performance.

7. Claims 25, 26, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamota et al., U.S. Patent No. 6,141,629 and Barzilai et al., U.S. Patent No. 6,012,045 as applied to claims 21 and 31 above, and further in view of Huang et al., U.S. Patent No. 5,953.707.

As per claims 25, 26, 36 and 37, Yamamoto et al. teach analysis, local and administrative controllers that communicate using wireless and global communication networks and where the administrative controller is configured to manage and control maintenance information (figure 12; column 9, lines 5-35). Barzilai et al. teach an internet site for obtaining warranty information. In particular, Barzilai et al. use the internet to automatically provide users with suppliers and manufacturers for products and services and identifies the company who will fulfill and correct any warranty problem and its location (column/line 8/49-9/35). While Huang et al. teach report generation based on a predefined set of criteria (column 36, lines 59-63) and where data is compared to a standard (column 36, lines 63-64). Therefore, it would have been obvious for one of ordinary skill in the art to combine the teachings of Yamamoto et al., Barzilai et al. and Huang et al. Building and construction projects are highly coordinated, highly time dependent activities. If a step or task in the construction process is running behind schedule all subsequent tasks will also fall behind

resulting in costly delays affecting not only the consumer but also the construction company regarding future contracts. Equipment failure is a common source of delays. Yamamoto et al. look avoid such an obstacle by continuously monitoring equipment operational data and by distributing this data throughout the company via a global network. A corporate website on the internet at the managing computer, where the data is ultimately stored, would provide an obvious focal point for systematic (column 13, lines 7-11) and non-systematic queries regarding the status of capital equipment worldwide. One such non-systematic query would be a consumer or project owner checking on the status of a project or in the event of machine failure who should be contacted. Also by printing out a report, a consumer can then relay to others or present his or her findings at a meeting or conference.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- LoVasco et al. teach a method for registering a warranty for a wireless device

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768. Any response to this action should be mailed to"

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clo Technology Center 2700

Washington, D.C. 20231 or faxed to:

(703) 308-9051 (for formal communications intended for entry)

or:

(703) 308-5397 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Calvin Loyd Hewitt II

October 1, 2001

JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100